USING HIGH PERFORMANCE BUILDINGS AS A STRATEGY

August 19, 2010



AGENDA / HOUSEKEEPING

AGENDA

- 1. Welcome &Introductions
- 2. Program Description
- 3. Program Requirements

HOUSEKEEPING

- 1. Push *2 to mute phone.
- 2. Do not put your phone on hold.
- 3. If you have questions, please click on the question mark on your screen, type in questions and submit.
- 4. Q & A will be compiled and posted to website following each webinar



COMMUNITY DEVELOPMENT STAFF

Cecelia Johnson-Powell, Community Development Director

Brian Philps, Community Development Assistant Director

Devyn Smith, Community Development Coordinator

Shonda Banner, Community Development Coordinator

Community Development Representatives

Northwest: Lisa Sims

North Central: Talisha Bradley

Northeast: Mike Recker

Southwest: Alan Rakowski

South Central: Jennifer Milliken

Southeast: Carmen Lethig



PURPOSE AND OBJECTIVES

- 1. Discuss the High Performance Building Strategic Priority
- Discuss using High Performance strategies with Aging in Place and Comprehensive Community Development projects
- 3. Describe guidelines and requirements
- 4. Provide information to assist applicants in submitting successful funding requests



HIGH PERFORMANCE BUILDINGS

A high performance home pays attention to energy efficiency, water and resource conservation, the use of sustainable or recycled products, and measures to protect indoor air quality.



HIGH PERFORMANCE DEFINED

2007 Energy Independence and Security Act
Sec. 401. Definitions. (12) HIGH-PERFORMANCE BUILDING –

"The term 'high performance building' means a building that <u>integrates and optimizes</u> on a life cycle basis all major high performance building attributes, including energy conservation, environment, safety, security, durability, accessibility, cost-benefit, 8) productivity, sustainability, functionality, and operational considerations."

2007 National Association of Home Builders Green Building Standard
Created to comply with the International Code Council and American National
Standards Institute to develop a nationally-recognizable standard definition of what is meant by "Green Building." www.nahb.org



Energy Efficiency Water Efficiency

Materials Efficiency Health/Indoor Environmental Quality

Operations and Maintenance

Site/Community



Energy Efficiency

Reduces building energy consumption

Water Efficiency

Reduces water use in building and/or site



Operating and Maintenance

Increases building durability

Reduces operating and maintenance expenses



Material Efficiency

Reduces, reuses and/or recycles materials that might have ended up in landfills

Reduces materials needed to construct or operate the building Uses
materials in a
way that
minimizes
environmental
damage



INTEGRATING HIGH PERFORMANCE

Develop a vision of the project that combines *programmatic* purpose, building *design* and building *performance*.



AGING IN PLACE AND HIGH PERFORMANCE BUILDING

PROGRAMMATIC VISION

As an affordable housing developer, you have decided to focus on Aging in Place. Your vision is "every low-income senior home in your community has been adapted to the special needs of aging adults. Every Aging in Place homeowner has information to assist with special needs."

BUILDING DESIGN

We will consult a Certified Aging-In-Place Specialist (CAPS) to assist with rehab activities.

Each house you touch will result be rehabbed with low-flow toilets or low-flow showerheads. Replacement materials and products will be recyclable. Materials used will be recycled. Each house will use the minimum materials required. Each house will be rehabbed with the most energy efficient materials available.

BUILDING PERFORMANCE

Each rehab will include an energy efficiency audit to test performance. Each rehab will collect utility bills to measure water usage.

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CONSTRUCTION/MATERIALS

CERTIFICATION	GBG	NGBSv2	LEED-H
Bronze / Certified	\$1,900 - \$2,700	\$2,000 - \$2,800	\$6,400 - 8,700
Silver	\$4,000 - \$4,700	\$4,900 - \$5,700	\$8,800 - \$11,000
Gold	\$8,200 - \$9,000	\$11,900 -\$13,600	\$19,300 – 22,400
Emerald/Platinum	n/a	\$28,200 - \$31,200	\$29,800 - 34,000

Table 6. Additional Direct Cost Estimates to bring Dallas House and Washington, DC House up to standards.



CERTIFICATION/VERIFICATION FEES

Table 10. Registration, Verification, and Certification Costs

	GBG and NGBSv2		LEED - H		
ACTIVITY	1-10 houses	500+ houses	1-10 houses	500+ houses	
Registration	n/a	n/a	\$150	\$150	
Program Certification	\$150	\$150	\$250	\$250	
Plan Review/Builder Collaboration	\$750	\$350	\$1,735	\$441	
Verification	Incl.	Incl.	\$1,600	\$600	
TOTAL	\$900	\$500	\$3,735	\$1,441	

The national GBG program was unveiled 02/14/08. The verifier network is currently being established. Estimates are based on known costs of a program of similar scope. Verifiers reported the plan review cost as zero. The number is an estimate of the cost of LEED-H AP required participation for every house.

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NAHB THRESHOLD POINT RATINGS

Green Building Categories		Performance Point Levels (1) (2)			
		BRONZE	SILVER	GOLD	EMERALD
1	Lot Design, Preparation, and Development	39	66	93	119
2	Resource Efficiency	45	79	113	146
3	Energy Efficiency	30	60	100	120
4	Water Efficiency	14	26	41	60
5	Indoor Environmental Quality	36	65	100	140
6	Operation, Maintenance, and Building Owner Education	8	10	11	12
7	Additional Points from any category	50	100	100	100
Total Points		222	406	558	697

GREEN COMMUNITIES

Comprehensive Community Development

+

High Performance Building

GREEN COMMUNITIES



SINGLE FAMILY REHAB

Consult the Green Communities "2008 Single Family Rehab Specifications" for information on:

Water, Moisture, Mold

Weatherization

Electrical

Ventilation

Paints, Caulks and Sealants

http://www.greencommunitiesonline.org/tools/resources/green_rehab_specs_gci_2008_criteria_final.pdf



MULTI-FAMILY/APARTMENTS

Chuska Apartments Healthy Home Guide

A Green Operations & Maintenance Manual for Chuska Apartments was developed for use by the development's management and maintenance staff, along with a Healthy Home Guide for the project's residents.

Template for Healthy Home Guide for Residents

This Template version of the Healthy Home Guide is based on the guide written for residents of The Plaza Apartments.

http://www.greencommunitiesonline.org/tools/resources/



SUSTAINABLE COMMUNITIES

IHCDA Stellar Communities RFP

- Fall 2010
- Comprehensive communities with high performance components
- Similar to HUD's Sustainable communities regional planning grants
- Transportation
- Jobs
- Education
- Retail
- Residential

HUD's Sustainable Communities Regional Planning Grants 8/23/2010 http://portal.hud.gov/portal/page/portal/HUD/program_offices/sustainable_housing_communities



RESOURCES

National Association of Home Builders www.nahbgreen.org

U.S. Green Building Council www.usgbc.org

Enterprise Green Communities www.greencommunitiesonline.org



QUESTIONS AND ANSWERS







